

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES
AT VILNIUS UNIVERSITY**

Scientific Area/eas, Field/ds of Science	Medical and Health Sciences (M 000): Medicine (M 001); Odontology (M 002)			
Faculty, Institute, Department/Clinic	Faculty of Medicine Institute for Biomedical Sciences Clinic of Ear, Nose, Throat and Eye Diseases			
Course unit title (ECTS credits, hours)	Surgical Otorhinolaryngology 8 credits (216 hours)			
Study method	Lectures	Seminars	Consultations	Self-study
Number of ECTS credits	-	2	2	4
Method of the assessment (in 10 point system)	<p>Presentation and evaluation of the report: the report is presented on a target topic, which is coordinated with the coordinating lecturers (the doctoral student must analyze, review and present the latest scientific publications related to the respective topic).</p> <p>Criteria for evaluating the report (minimum passable score - 5):</p> <p>(a) relevance, novelty and correspondence to the chosen topic (2 points);</p> <p>(b) general structure and scope of the report, clear presentation of the knowledge, argumentation, brevity and specificity (2 points);</p> <p>(c) summary, presentation of conclusions and argumentation (1 point);</p> <p>d) raising problematic issues, presenting the application of the reviewed knowledge in the dissertation (3 points);</p> <p>e) Organization of visual aids, ability to participate in a discussion, management of questions, oratory skills (2 points).</p>			
PURPOSE OF THE COURSE UNIT				
<p>To provide theoretical and practical knowledge in the field of surgical otorhinolaryngology. To acquaint with the possibilities of surgical treatment, early diagnostic tools in diagnosing surgical pathologies, principles of choice of surgical technique, peculiarities of anesthesia, the main complications, postoperative care. To promote an interdisciplinary, holistic approach to otorhinolaryngological problems of the surgical profile, modern and new research methods to address interdisciplinary problems of relevant doctoral topics in different disciplines and fields.</p>				
THE MAIN TOPICS OF COURSE UNIT				
<p><u>Surgical otology</u></p> <p>Peculiarities of anesthesia for ear surgery. Surgical treatment of chronic otitis media. Surgical treatment of chronic tubotympanic otitis: indications, principles, complications. Types of tympanoplasty. Biomechanical aspects in middle ear reconstruction: acoustic mechanical properties of a healthy ear drum and a reconstructed ear drum. Principles of choice of surgical technique in the treatment of chronic cholesteatoma. Open and closed type of ear surgeries, their advantages and disadvantages. Significance of reoperation in cholesteatomas. The main complications: open meninges, cerebral prolapse, labyrinthine fistula, open facial nerve, sinus thrombosis, otogenic sepsis, meningitis, cerebral abscess, epidural abscess, last hearing ear. Peculiarities of cholesteatoma treatment in children and adults. Hearing improvement surgeries. Biomechanics and parameters of reconstructed auditory ossicular chain. Requirements for middle ear reconstructive materials. Options for surgical treatment of acute otitis</p>				

media. Possibilities of surgical treatment of serous ear inflammation. Otoplasty. Microthia, external auditory atresia, possibilities of operative treatment of ear exostosis. Surgical treatment of ear trumpet function: adenoidectomy, laser tuboplasty, dilated ear trumpet. Possibilities of surgical treatment of otosclerosis, types of prostheses, peculiarities of surgical technique. Implantable middle ear devices: BAHA, Vibrant sounbridge. Implantations of middle ear hearing aids, their disadvantages and advantages, patient selection, peculiarities of surgical technique, postoperative care and follow-up. Advantages of implantable hearing aids over non-implantable hearing aids. Selection of patients for cochlear implantation. Preoperative examination and preparation for surgery. Cochlear implantation. Ear tumors: indications, principles of surgery, complications. Postoperative care of patients after ear surgery.

Surgical rhinology

Peculiarities of anesthesia in nasal surgery. Possibilities of surgical treatment for acute and chronic sinusitis: indications, principles, complications. Functional endoscopic sinus and nasal surgery: indications, principles, complications. Radical maxillary sinus surgery. Peculiarities of surgical treatment in surgery of frontal and sphenoid sinuses. Peculiarities of repeated sinus surgeries. Possibilities of surgical treatment of chronic rhinitis: conchoplasty, conchotomy, electrical disintegration, laser conchoplasty. Individual patient selection for each surgical technique, their advantages and disadvantages. Complications of surgical treatment, their prevalence. Possibilities of surgical treatment of a deviated nasal septum: indications, principles of surgery, complications. Principles of rhinoplasty, complications. Surgical treatment of tumors of the nasal, sinuses and skull base: indications, principles of surgery, complications. Surgical treatment of choanal atresia: indications, principles, complications. Surgical treatment of nasal trauma: indications, principles, complications. Possibilities of surgical treatment of epistaxis: indications, principles, complications. Postoperative care of patients after nasal surgery.

Surgical laryngology

Peculiarities of anesthesia in laryngeal surgery. Surgical treatment of non-malignant laryngeal formations (nodules of the vocal folds, laryngeal polyps, laryngeal cysts, non-specific laryngeal granulomas, papilloma, fibroma, hemangioma): indications, principles, complications. Surgical treatment of chronic non-specific laryngitis (chronic catarrhal laryngitis, granulomatosis, laryngeal stenosis, mucosal hyperplasia): indications, principles, complications. Surgical treatment of precancerous laryngeal conditions (chronic hyperplastic laryngitis) and laryngeal cancer: indications, principles, complications. Peculiarities of surgery in children and adults.

Surgical pharyngology and obstructive sleep apnea

Diagnosis and surgical treatment of acute and chronic diseases of the pharynx. Peculiarities of surgical treatment of sleep apnea and selection of patients for surgical treatment. Surgical treatment of pharyngeal tumors: indications, principles, complications. Postoperative care of patients after pharyngeal surgery.

RECOMMENDED LITERATURE SOURCES

1. Cummings Otolaryngology, 7th Edition
by Paul W. Flint, MD, Bruce H. Haughey, MD, FACS, Valerie J. Lund, CBE, MS, FRCS, FRCSEd, K. Thomas Robbins, MD, FACS, J. Regan Thomas, MD, FACS, Marci M. Lesperance, MD and Howard W. Francis
2. Biomedical Optics in Otorhinolaryngology: Head and Neck Surgery 2016
by Brian J.-F. Wong, Justus Ilgner
3. The Laryngoscope journal <https://onlinelibrary.wiley.com/journal/15314995>
4. ENT & Audiology news <https://www.entandaudiologynews.com/>
5. Symptom Oriented Otolaryngology: Head & Neck Surgery – Three Volume Set 2017
by Zahoor Ahmad , Randall P. Morton, Malcolm Giles

6. Laryngology: A Case-Based Approach Paperback –2019 Jacqueline Allen, S.A. Reza Nouraei, Guri S. Sandhu
7. Rhinology and Skull Base Surgery: From the Lab to the Operating Room - An Evidence-based Approach 1st Edition Christos Georgalas, Wytske Fokkens
8. European Journal of Rhinology and Allergy <https://www.eurjrhinol.org/>
9. Journal of Audiology and otology <https://www.ejao.org/>
10. Head & Neck journal <https://onlinelibrary.wiley.com/journal/10970347>

CONSULTING LECTURERS

1. Coordinating lecturer: Eugenijus Lesinskas (Prof. Dr.).
2. Justinas Ivaška (Assoc. Prof. Dr.).
3. Darius Rauba (Dr.).
4. Vilma Beleškienė (Dr.)

APPROVED:

By Council of Doctoral School of Medicine and Health Sciences at Vilnius University:
29th of September 2022

Chairperson of the Board: Prof. Janina Tutkuvienė